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BIRDS COLLECTED DURING THE WHITNEY SOUTH SEA EXPEDITION. XXVIII[1]

NOTES ON SOME BIRDS FROM NEW BRITAIN, BISMARCK ARCHIPELAGO

BY ERNST MAYR

Mr. William F. Coultas spent the greater part of the years 1932 and 1933 in the northern and central part of New Britain and succeeded in making a collection which is far superior to any previous collection from that island. He is the first collector to undertake a thorough survey of the mountain bird life, but in addition to that he succeeded in bringing together a beautiful and practically complete collection of lowland birds including (sometimes in series) such rarities as *Henicopernis longicauda infuscata, Accipiter luteoschistaceus, Accipiter brachyurus, Falco peregrinus ernesti, Habropteryx insignis, Columba pallidiceps, Henicophaps foersteri, Loriculus tener, Tyto aurantia, Alcyone websteri, Ortygocichla rubiginosa, Acrocephalus meyeri, Lonchura melaena,* and others. The collection is accompanied by very extensive field notes and individual life histories of practically all the species. An exhaustive report on the New Britain bird fauna will be given after Mr. Coultas has completed his survey of the Bismarck Archipelago, and I shall confine myself in the present paper to a description of the novelties and to a few remarks on other interesting species.

Dendrocygna arcuata (Horsfield)

Anas arcuata HORSFIELD, 1824, 'Zool. Res. Java,' part 8, Pl. LXIV, Java.

Five birds were taken between April 6 and 8, 1933, at Maulo, Wide Bay. This represents the first record of the species for New Britain. The species seems to be migratory according to Mr. Coultas' notes.

Accipiter (gentilis) meyerianus (Sharpe)

Astur Meyerianus SHARPE, 1877, Jour. Linn. Soc., XIII, p. 458, Jobi Island.

Astur planes REICHENOW, 1910, Jour. f. Ornith., LVIII, p. 412, Vuatom Island.

Accipiter planes manehi STRESEMANN, 1922, Orn. Monatsber., XXX, pp. 109–111, Seran, Moluccas.

[1]Previous papers in this series comprise American Museum Novitates, Nos. 115, 124, 149, 322, 337, 350, 356, 364, 365, 370, 419, 469, 486, 488, 489, 502, 504, 516, 520, 522, 531, 590, 609, 628, 651, 665, and 666.

See also: KLEINSCHMIDT, 1923, Berajah, *Falco Palumbarius*, pp. 12–15; STRESEMANN, 1924, Jour. f. Ornith., LXXII, pp. 442– 443; HARTERT, 1929, Amer. Mus. Novit., No. 364, p. 5.

The only specimen of this species sent by Mr. Coultas from New Britain is in a most unusual plumage; it is melanistic, just as are some specimens of its African representative, *A. melanoleucos* (Smith) (see Bannerman, 1930, 'Birds of Tropical West Africa,' I, p. 283). Tropical goshawks, like some other tropical hawks, apparently tend to melanism.

The New Britain specimen may be described as follows:

ADULT FEMALE.—Under parts and upper parts entirely black; base of the feathers on crown, hind neck, and upper back white; axillaries and under wing-coverts black, under side of wing dark gray; white bars on under side of primaries are equally as pronounced as in the normal phase, or more so; upper tail-coverts black, with narrow but well-defined white bars and spots; the tail, which is almost uniformly colored in the normal phase, is distinctly barred. These light gray crossbars are visible not only on the under side of the outer tail-feathers, but show on the two central pairs also on the upper side.

	WING	TAIL	TARSUS	MIDDLE TOE
Kulambangra ♀ ad. (1)	322	227	78	50
New Britain ♀ ad. (2)	342	239	86	56

	PROPORTIONS		
	Tail × 100 / Wing	Tarsus × 100 / Wing	Middle toe × 100 / Tarsus
♀ ad. (1) normal	70.5	24.8	64.1
♀ ad. (2) melanistic	69.9	25.2	65.1

The foot of *meyerianus* is relatively large, as seen by the middle toe–tarsus index, the long-toed *Accipiter brachyurus* (a representative of *A. nisus*) being the only hawk on New Britain or the Solomon Islands, which has a relatively longer middle toe. This is another bit of evidence to show the impossiblity of upholding the genus *Astur*, whose main character in the Palaearctic and Nearctic forms is the relative shortness of its toes.

Melanistic specimens of *Accipiter melanoleucus* never seem to become entirely black (see Kleinschmidt, 1923, Berajah, *Falco Palumbarius*, Pl. XIII), there is some white retained at least on chin and upper throat, while the entire body plumage becomes black in *meyerianus*. It is remarkable, however, that the bars on wing and tail appear more pronounced in the melanistic specimen of *meyerianus* than in the specimen in the normal phase.

Accipiter princeps, new species

TYPE.—No. 417430, Amer. Mus. Nat. Hist.; ♂ ad.; Balayang (2500 ft.), Wide Bay, New Britain; Feb. 12, 1933; W. F. Coultas.

ADULT MALE AND FEMALE.—Entire upper side slate-gray, wing and tail darker, tips of primaries and under side of tail almost blackish; sides of head and of neck light slate-gray; middle of throat, breast, belly, flanks, and under tail-coverts white; breast, particularly the sides of the breast, with a slight grayish wash, sometimes in the form of an indistinct vermiculation; axillaries and under wing-coverts white, occasionally with a few grayish crossbars; tail-feathers uniform, without any light bars; inner webs of the wing-feathers near the base white with a gray mottling; the four outermost wing-feathers slightly emarginated on the inner web; wing-formula 5>4>3>6>2, or 4>5>3>6>2. "Iris, bright orange to flesh-orange; cere, reddish orange; bill, black, base of the lower mandible, orange; feet yellow-orange."

	WING	TAIL	TARSUS	MIDDLE TOE
New Britain ♂ ad. (1)	257	186	71	36
♂ ad. (2)	253	183	68	38
♀ ad.	285	207	70	38

I add a list of size proportions which will help in a comparison of this species with others from the same region.

		Tail × 100 / Wing	Tarsus × 100 / Wing	Middle Toe × 100 / Tarsus
Accipiter				
poliocephalus	♂ ad.		28.9	53.5
	♀ ad.	72.4	31.0	49.2
princeps	♂ ad. (1)	72.4	27.6	50.7
	♂ ad. (2)	72.3	26.9	55.9
	♀ ad.	72.6	24.6	54.3
sharpii	♂ ad.	70.3	27.5	57.4
	♀ ad.	73.0	26.6	58.8
albogularis	3 ♂ ad.	70.6	28.5	56.8
	4 ♀ ad.	72.7	26.9	61.4
luteoschistaceus	3 ♂ ad.	76.2	32.7	61.2
brachyurus	3 ♀ ad.	71.4	30.7	71.4

This table reveals at once that the proportion of tail and wing is approximately normal in this species, while the tarsus is extremely short, and the middle toe very short.

A comparison of the new species with all the other species of *Accipiter* recorded from the Melanesian and Papuan regions shows that it resembles only one, namely *Accipiter poliocephalus* from New Guinea and surrounding islands. The new species differs, however, in so many characters that it seems to be advisable to regard it for the time being as a separate species, particularly so long as the immature plumage is unknown.

Accipiter princeps differs from *poliocephalus* by being much larger; by having head and sides of the head as dark gray as the mantle, not lighter; by having the second primary shorter than the sixth, not longer; by having the base of the tail-feathers slightly sprinkled with white, not distinctly barred; by having broad tail-feathers, not narrow ones; by having much less white on the under side of the wing; by having the four outer wing feathers less distinctly emarginated; and by having a relatively shorter tarsus and much stronger feet. The toes are reticulate, not scutellate, but a tendency toward this can also be found in *poliocephalus*.

RANGE.—Inland of Wide Bay, New Britain, Bismarck Archipelago.

MATERIAL EXAMINED.—2 ♂ ad., Feb. 12 and Feb. 21, 1933, Balayang, Baining Mountains, 2500 ft.; 1 ♀ ad., May 10, 1933, Timoip Mountains, 3600 ft.

Ducula melanochroa (Sclater)

Carpophaga melanochroa SCLATER, 1878, Proc. Zool. Soc. London, p. 672, Pl. XLII, Duke of York Islands.

Mr. Coultas has sent a fine series of this rare mountain species, of which Hartert says correctly: "It has no close ally, and stands by itself" (1925, Nov. Zool., XXXII, 117). The bird resembles superficially *Ducula pinon* of New Guinea, particularly in having light edges on the upper wing-coverts. It differs, however, in lacking the bare space around the eye, in its much weaker feet, and in the absence of a tail-band.

Columba pallidiceps (Ramsay)

Janthoenas pallidiceps RAMSAY, 1877, Proc. Linn. Soc. New South Wales, II, p. 248, Duke of York Islands.

Janthenas philippanae RAMSAY, 1881, Proc. Linn. Soc. New South Wales, VI, p. 721, Ugi, Solomon Islands.

A small series of the yellow-legged pigeon from New Britain agrees well with a series from the Solomon Islands. *Janthenas philippanae* was based by Ramsay on purely individual differences. The metallic gloss is of a different color in almost every specimen.

I have already pointed out in a previous paper (1931, Amer. Mus. Novit., No. 504, p. 10) that this is a distinct species, not a representative of *vitiensis*, as believed by Hartert (1925, Nov. Zool., XXXII, p. 118). *Columba vitiensis* apparently has never been recorded from New Britain, but both species occur together on some islands in the Solomon Islands. Considering the uncertainty of the specific status of *pallidiceps* and *vitiensis*, it may be worth while to give a key of their characters.

1.—Feet yellow, entire head light gray ..... *pallidiceps.*
2.—Feet red, upper throat white, upper head slate-gray with metallic gloss.
vitiensis halmaheira.

Gymnophaps albertisii albertisii Salvadori

Gymnophaps albertisii Salvadori, 1874, Ann. Mus. Civ. Genova, VI, p. 86, Andai, Arfak Mountains, New Guinea.

This species has already been reported from New Britain by Rev. O. Meyer, but I am not sure whether any specimens have ever reached any museum. Mr. Coultas sent a fine series from the Nakanai Mountains and from the mountains back of Wide Bay. These birds can not be separated with certainty from typical New Guinea birds. New Britain birds are on the average more white on the breast (with less of the pinkish buff wash), more gray on the upper throat (the gray frequently forming a band across the throat), and with a distinctly grayish wash in the chestnut zone of the upper belly. The measurements average slightly larger than those of New Guinea birds, but there is considerable overlap. I am not following the fashion of those ornithologists who describe new subspecies on the basis of such slight size differences.

		Wing		Wing
New Guinea	11 ♂	193–214 (202.8)	5 ♀	198–205 (202.5)
New Britain	16 ♂	204–219 (213.6)	12 ♀	195–219 (205.2)
Batjan	4 ♂	219–234 (225.2)	4 ♀	208–227 (219.5)

The measurements of the Batjan series (kindly supplied by Prof. Stresemann) prove that the birds from the northern Moluccas are consistently larger, as correctly pointed out by Hartert in the original description of *exsul.*

In skins, the lores and the bare space around the eye are sometimes red and sometimes yellow. This variation, however, is entirely due to the manner of preparation and drying. These parts are always entirely coral red in living birds.

Streptopelia chinensis tigrina (Temminck)

Columba tigrina Temminck, 1811, 'Pigeons,' I, Pl. xliii, Java.

This is the first record for this dove on New Britain. It has been introduced apparently only very recently, presumably by some Malays from the Moluccas where the bird is frequently kept in captivity.

The three specimens collected by Mr. Coultas agree perfectly with specimens from the Sunda Islands, except that lower abdomen and under tail-coverts are rather buffy, not whitish.

Chalcophaps stephani stephani Pucheran

Chalcophaps stephani PUCHERAN, 1853, 'Voy. Pôle Sud,' III, (Zool.), p. 119, Pl. XXVIII, fig. 2, Triton Bay, New Guinea.

A small series of this ground dove was very welcome for comparison with New Guinea birds.

		WING		WING
New Britain (Coultas Coll.)	8 ♂ ad.	135–114 (141.0)	2 ♀	136, 139
New Guinea (Beck Coll.)	6 ♂ ad.	140–146 (143.2)	1 ♀	140

These measurements show that birds from New Britain average slightly smaller than New Guinea specimens. The subspecies from the Solomon Islands (*mortoni*) is considerably larger (wing up to 154).

Loriculus tener Sclater

Loriculus tener SCLATER, 1877, Proc. Zool. Soc. London, p. 107, Duke of York Islands.

Mr. Coultas brought back two specimens of this rare parrakeet, one from the neighborhood of Rabaul and the other from the Wide Bay. I have found no records that this species has ever been taken before on New Britain. It is known from the Duke of York Islands, New Ireland, and New Hanover.

Eurystomus orientalis crassirostris Sclater

Eurystomus crassirostris SCLATER, 1869, Proc. Zool. Soc. London, p. 121, "Solomon Islands," correctly: New Ireland. (See Sharpe, 1890, Proc. Zool. Soc. London, p. 552, and Mayr, 1933, Ibis, p. 551.)

Eurystomus neohanoveranus HARTERT, 1901, Nov. Zool., VIII, p. 185 (footnote), New Hanover.

The geographical variation of this roller has not been understood so far and almost every new form has been described with some misapprehension. To begin with, *crassirostris* Sclater was based on a single specimen of doubtful origin, and the type apparently has been lost. It was obviously a very badly preserved specimen with the colors much altered by alcohol. This explains the characters given in the original description and later mentioned by Elliot (Ibis, 1871, p. 204).

Eurystomus waigiouensis Elliot was compared with this single pitiful specimen of *crassirostris* and of course was found to differ. Salvadori, however, and all the authors after him, assumed that New Guinea birds were identical with New Britain birds and synonymized

waigiouensis with *crassirostris* (*auctorum, nec* Sclater) since the Waigeu type did not differ from New Guinea birds.

Hartert committed the same error when he described the New Hanover bird as new. He had no material from New Ireland or New Britain and therefore compared his birds only with the Solomon Island subspecies, *solomonensis*. He says (*op. cit.*, p. 185): "It differs from *E. solomonensis*, which it resembles most, in the more uniform and more purplish gular patch, on which the shaft-lines are much less developed. The blackish forehead has a distinct purplish tinge, which is not visible in *E. solomonensis;* the hind neck and mantle are more bluish green, less tinged with blackish brown." And later he says (1924, Nov. Zool., XXXI, p. 206): "This form differs from *E. o. crassirostris* (New Guinea and New Britain) in the more purplish crown, more bluish back; the light shaft-lines on the throat are less conspicuous, and the black tip on the bill is more restricted and (in one) even absent." Obviously, however, he had at that time no specimens from New Ireland or New Britain, since New Britain birds differ from New Guinea and from Solomon Islands birds by the very characters mentioned by Hartert as peculiar to New Hanover birds. Hartert himself seems to have noticed this when he finally received some material from New Britain (1926, Nov. Zool., XXXIII, p. 137). He admits that *neohanoveranus* is probably not valid, but he fails to distinguish clearly the characters of the New Britain and New Guinea birds.

Since the differences between adult birds of the two islands apparently have never been clearly stated, I should like to give below a short diagnosis of *crassirostris* Sclater, based on New Britain specimens, which are obviously not at all different from New Hanover birds. New Britain birds differ from New Guinea birds by being much more bluish all over the body. They lack, on hind neck, back, upper wing-coverts, and breast, the greenish-brown tone of New Guinea birds. Forehead and crown are darker and with a distinct bluish wash, not fuscous with a greenish or brownish tinge. The ear-coverts also are noticeably washed with ultramarine blue. The streaking of the throat is more or less obsolete, the throat patch thus gaining a more uniform purplish appearance. The extension of black on the culmen of the maxilla is much less, on the average, than in New Guinea birds; in a few specimens the black is entirely missing.

It is clear from this discussion that it is wrong to use the name *crassirostris* Sclater for New Guinea birds. They can be called *waigiouensis* Elliot since we have no evidence so far that the birds from the

western Papuan Islands are different from the birds found on the New Guinea mainland. Further revisional work is necessary to show whether or not there are any differences between birds of eastern and western New Guinea.

Rhyticeros plicatus

The study of the individual and geographical variation of this species has been greatly neglected up to recent years. It was assumed that there was no difference between birds from the New Guinea region, the Bismarck Archipelago, and the Solomon Islands. However, in 1924 Hartert described the bird from Guadalcanar, Solomon Islands, as a distinct subspecies and thus opened up the field for a more detailed investigation. The rich material gathered by the Whitney South Sea Expedition permits new conclusions to be drawn concerning the geographical variation in this species. It seems that there are at least four well-defined subspecies in the range outlined above, differing in size, in the shape of the bill, and in the coloration of the neck of the male.

Rhyticeros plicatus ruficollis (Vieillot)

Buceros ruficollis Vieillot, 1816, 'Nouv. Dict. d'Hist. Nat.,' Nouv. Éd., IV, p. 600, Waigeu Island.

Subspecific Characters.—Large, with a heavy bill; neck of the male rufous ochraceous.

	Wing	Tail	Bill[1]	Pleats[2]
8 ♂ ad.	437, 443, 443	255, 256, 258	210, 212, 216	6, 6, 6.5
	444, 447, 450	260, 264, 266	223, 223, 224	7, 7, 7
	454	268, 269	225, 227	7, 8
3 ♂ (ad.)	432, 443, 447	252, 262, 264	185, 198, 199	2, 2, 3
3 ♂ imm.	398, 405, 410	240, 242	145, 163, 174	1, 1, 1
1 ♀ ad.	441	(221)	167	5
3 ♀ imm.	394, 395, 398	233, 236, 241	148, 161, 170	1, 1, 3

Range.—Northern Moluccas, western Papuan Islands, New Guinea, Japen, and D'Entrecasteaux Archipelago.

It is doubtful whether the birds of the range outlined above form a uniform population. I have not seen enough material from western New Guinea, the western Papuan Islands, and the northern Moluccas. Unfortunately, most of the published descriptions and measurements are quite useless, since the authors did not keep apart the ages or sexes. However, birds from the northern Moluccas seem to have the neck darker in the male plumage than New Guinea birds, thus approaching

[1]Measured from the anterior edge of the nostril to the tip.
[2]Number of pleats on the casque.

plicatus (Forster) from Seran (southern Moluccas). Birds from the western Papuan Islands (including the type-locality, Waigeu) apparently agree in coloration with New Guinea birds, but there is the possibility of a size difference, in which case the New Guinea race would require a new name. The New Britain bird, however, is decidedly different.

Rhyticeros plicatus dampieri, new subspecies

TYPE.—No. 333346, Amer. Mus. Nat. Hist.; ♂ ad.; Baining Mountains, New Britain; Aug. 30, 1932; W. F. Coultas.

SUBSPECIFIC CHARACTERS.—In coloration somewhat similar to *Rhyticeros plicatus ruficollis* Vieillot, but much smaller and with a shorter and slenderer bill; naked area on throat apparently less extended; color of neck (in the male plumage) darker, rufous chestnut on the hind neck, thus approaching *plicatus;* differs from *mendanae* Hartert, which it approaches in proportions, in the dark and rich coloration of neck and breast, parts which are very pale in *mendanae.*

	WING	TAIL	BILL	PLEATS
1 ♂ ad.	407	244	183	6.5
1 ♂ imm.	387	208	150	1
2 ♀ ad.	—, 372	212, 224	137, 144	4, 5

RANGE.—New Britain, New Ireland, and New Hanover, Bismarck Archipelago.

The material collected by Coultas is sufficiently large to show that this is a small subspecies. More specimens, however, must be collected before it can be decided whether or not the measurements overlap with those of *ruficollis* Vieillot.

The adult male has some abnormal white feathers on the upper wing-coverts and on the back.

Rhyticeros plicatus harterti, new subspecies

TYPE.—No. 220992, Amer. Mus. Nat. Hist.; ♂ ad.; Bougainville Island, Solomon Islands; Jan. 30, 1928; F. P. Drowne.

SUBSPECIFIC CHARACTERS.—In coloration indistinguishable from *mendanae* Hartert, but much larger, and with a longer and heavier bill.

		WING	TAIL	BILL	PLEATS
Fauro and Shortland Is.	♂ ad.	409, 400	237, 235	199, 200	4.5, 5
	♂ (ad.)	410	246	181	3
	♀ ad.		229	153	6
Bougainville	♂ ad.	428	249	200	7
	♀ ad.	392	225	163	6
Buka	♂ ad.	412, 418	241, 244	196, 212	5, 5
	♀ ad.	394	225	160	5

RANGE.—Bougainville, islands of Bougainville Straits (Fauro and Shortland Islands), and Buka, northern Solomon Islands.

I name this form in honor of the late Dr. Ernst Hartert, who did more than anybody else to advance the knowledge and better understanding of the bird fauna of the Solomon Islands.

Birds from the islands of Bougainville Straits average slightly smaller, but they have larger bills than any specimen of *mendanae* Hartert.

Rhyticeros plicatus mendanae Hartert

Rhyticeros plicatus mendanae HARTERT, 1924, Bull. Brit. Orn. Club, XLV, p. 46, Guadalcanar, Solomon Islands.

SUBSPECIFIC CHARACTERS.—Very small form with a short, slender bill; neck and throat in the male very pale, almost straw-colored.

		WING	TAIL	BILL	PLEATS
Guadalcanar	♂ ad.	407, 394, 395	237, 234, 238	177, 166, 163	7, 6, 4.5
		385, 393, 382	237, 231, 221	163, 182, 166	4.5, 5.5, 6
	♂ (ad.)	377	228	157	3
	♂ imm.	373	224	141	1
	♀ ad.	379, 373, 369	212, 210, 208	148, 150, 135	6, 6, 8
		365, 374	210, 221	146, 147	4.5, 5
Malaita	♂ ad.	396, —, 405	244, 250, 255	178, 174, 180	6, 5, 5
		399	238	173	5
	♀ ad.	380	222	133	6
Ysabel	♂ ad.	392, 404	231, 236	186, 176	6, 6
	♂ imm.	376, 390	224, 228	143, 151	1, 1
	♀ ad.	359, 382	210, 214	139, 146	5, 6
	♀ imm.	354	210	131	1
Choiseul	♂ ad.	—, 389, 377	241, 227, 215	173, 176, 166	–, 6, 5
		382, 387, 393	223, 226, 224	181, 185, 176	5, 5.5, 5.5
		400	229	194	6
	♂ (ad.)	402	233	162	2.5
	♂ imm.	372	212	135	1
	♀ ad.	366	208	145	5
	♀ (imm.)	354, 366	202, 203	127, 137	3, 3
		365, 358	208, 208	147, 136	2, 1
Vangunu	♂ imm.	382	221	158	1

RANGE.—Choiseul, Ysabel, Malaita, Guadalcanar, and Vangunu, Solomon Islands.

This species has a curious distribution on the Solomon Islands. It is completely absent from San Cristobal and neighboring islands, and seems to be absent also from the Central Solomon Islands. One specimen from Vangunu is the only record from that group.

The birds from the five islands listed do not form a uniform population. Birds from Malaita average larger, and birds from Choiseul Island

seem to have a particularly small tail. As a group, however, they are visibly smaller than *harterti* from the northern Solomon Islands.

The examination of a large series of specimens of this species gave me a good opportunity to study the growth of the pleats on the bill. The Malay name of this hornbill is "burung tahun," meaning year-bird. The natives believe that the bird acquires one additional pleat on its casque every year. There has been considerable argument among ornithologists as to whether this is true, but Stresemann has shown rather definitely that this belief is erroneous (1914, Nov. Zool., XXI, p. 99). The extensive tables of measurements published above show conclusively that males in the immature plumage have an undivided casque (indicated in my tables as "1"). Birds with a fully adult plumage, but with a still growing bill, have either two or three pleats; these birds are indicated as "♂ (ad.)" in my tables. Adult birds with a fully grown bill have four and one-half to eight pleats, but I am not at all sure that birds with many pleats are older than those with few. Some of my specimens with the largest bills have the fewest pleats on the casque, and vice versa. The outermost pleat, furthermore, breaks off easily, as shown by Stresemann (*loc. cit.*) and as also substantiated by my material. Conditions in females are somewhat more difficult, and I need more material before I can distinguish definitely between immature and semi-adult "(ad.)" female birds.

I wish to call attention to the specimens in the "(ad.)" plumage. They have perfectly adult coloration and can not be distinguished from fully adult birds except by their measurements, particularly those of the bill. The number of pleats on the casque is two or three. These specimens are obviously in their first adult year, and permit the interesting conclusion that adult birds can keep on growing after reaching maturity. This is quite obvious for the bill and also, in minor degree, is true for wing and tail. It can be seen from the above listed measurements that birds in the "(ad.)" plumage average smaller in regard to wing and tail than birds in the fully adult plumage. There has been some disagreement as to whether birds always reach their full size in their first completely adult plumage. The evidence in this case points to the contrary.

Hirundo tahitica

Looking over the publications on the birds of the Bismarck Archipelago I find that sometimes *Hirundo tahitica* (=*subfusca* Gould), sometimes *Hirundo javanica* (=*frontalis* Quoy and Gaimard), and sometimes even both species are listed as occurring on New Britain. This

situation was not disturbing so long as both forms were regarded as distinct species, but after Stresemann had united them quite correctly into one species, some explanation had to be found. Stresemann (1923, Arch. f. Naturg., LXXXIX, A8, p. 25) records *tahitica* as the form living on New Britain (following Sharpe, 1885, 'Cat. Birds,' X, p. 143), adding that specimens with white in the tail sometimes occur in the range of that form, while Hartert on the contrary (1926, Nov. Zool., XXXIII, p. 139), calls the New Britain form *Hirundo tahitica frontalis* and expresses the opinion that *Hirundo tahitica* probably occurs only as a straggler.

Considering this conflict of opinions, I emphasized to Mr. Coultas the necessity for collecting in New Britain a series of swallows, with the gratifying result that I have now before me fifteen specimens, a sufficient number to settle the argument. The truth of the matter is that New Britain is inhabited by an unrecognized form with a high degree of individual variation, a form which in most of its characters is intermediate between *frontalis* and *subfusca.*

Hirundo tahitica ambiens, new subspecies

TYPE.—No. 417431, Amer. Mus. Nat. Hist.; ♂ ad., Wide Bay, New Britain; Jan. 10, 1933; W. F. Coultas.

SUBSPECIFIC CHARACTERS.—Similar to *Hirundo tahitica subfusca* Gould, but averaging smaller; breast and belly lighter and less brownish, edges of feathers whitish, not buff; fewer or no feathers with glossy black centers in the middle of breast and abdomen; glossy black centers of under tail-coverts less pronounced; two-thirds of the specimens with white on the tail, while in *subfusca* the tail is usually entirely black, only every sixth specimen having a small, scarcely noticeable light shading on the fifth tail-feather; tertials frequently with narrow buffy edges, which are absent in *subfusca;* differs conspicuously from *frontalis* in larger size, comparatively longer tail, much darker under parts, and the reduced amount of white in the tail.

Iris dark brown, bill and feet black.

	WING	TAIL	TAIL-WING INDEX
8 ♂	109–113 (110.3)	49–52 (50.9)	46.1
7 ♀	103–110 (106.7)	47–50 (48.7)	45.6

RANGE.—Bismarck Archipelago.

The molting period seems to cover more than four months. I have a completely molted specimen from the second week of January and a specimen in full molt from April. Two other April birds however, have, already completed the molt.

A comparison of the New Britain series with neighboring races reveals at once its general similarity with *subfusca.* The extreme variability of the amount of white in the tail suggests the possibility that *ambiens* is a hybrid population between *frontalis* and *subfusca.* How-

ever, size and general characters of coloration are fairly constant, and it seemed to be advisable to name this well-characterized population in spite of the fact that a few of the specimens (among those without any white in the tail) are barely different from *subfusca.*

The species *Hirundo tahitica* is badly in need of a revision, but this can not be done so long as this common bird is neglected by the collectors. A few remarks on the material before me may help in future work.

Hirundo tahitica tahitica Sparrman is restricted to the Society Islands and differs from *subfusca* Gould fundamentally in many characters. It is by far the most peculiar form of the species, and the rarity of specimens is the only excuse for the fact that *subfusca* Gould has always been synonymized with it.

Hirundo tahitica subfusca Gould.—This form ranges from Central Polynesia to the New Hebrides and the Solomon Islands without any obvious geographical variation in this area. This Polynesian form, (together with *tahitica* Sparrman) will be treated in detail at a later date. I content myself at present with recording some measurements from the type locality (Moala Island) and some of the adjoining islands.

	Wing	Tail	Tail-Wing Index
6 ♂	110–115 (112.3)	49–51 (49.8)	44.3
9 ♀	109–113 (111.2)	47–50 (48.5)	43.6

Hirundo tahitica frontalis Quoy and Gaimard [type locality: Dorey (Manokwari), northwestern New Guinea].—This form is supposed to range from Celebes and the Lesser Sunda Islands eastward to New Guinea and neighboring islands. However, the birds included in this range do not seem to form an entirely uniform population. Birds from eastern and southern New Guinea and from the islands of Torres Straits are apparently lighter underneath, average smaller, and have larger white spots on the tail than typical birds. This has been noticed already by Sharpe (1885, 'Cat. Birds,' X, p. 143). Birds from the Lesser Sunda Islands and from Celebes agree in coloration with typical *frontalis* (wing, 104–110 mm.), but average smaller (wing, 97–108 mm.). This size difference seems too irrelevant to recognize *viridissima* Meise. Rensch (1931, Mitt. Zool. Mus. Berlin, XVII, p. 549) has already pointed out that the color characters (greenish gloss of the upper parts), which Meise attributes to his "new" form, are not valid. I have examined some of Meise's paratypes, and agree with Rensch's conclusion. The gloss of the upper parts is extremely variable in this species and is entirely determined by the amount of wear. Freshly molted birds have a distinctly greenish tinge, which turns steel-blue later in the season, and purplish in worn specimens.

Cisticola exilis polionota, new subspecies

TYPE.—No. 332816, Amer. Mus. Nat. Hist.; ♂ ad., summer dress (testes large); Baining District, New Britain; June 21, 1932; W. F. Coultas.

SUBSPECIFIC CHARACTERS.—Similar to *diminuta* Mathews, but paler and much less rufous; edges of the feathers of the back distinctly grayish, with practically no ochraceous tinge; back consequently in sharp contrast with the orange-ochre crown and the dull ochre rump; crown in many breeding males with well-marked diffuse black shaft-streaks, while in *diminuta* the crown is usually without any shaft-streaks; under parts, particularly in specimens in the winter dress, much paler, with the rufous wash replaced by a pale ochraceous wash; rufous nuchal collar in females and winter males much less pronounced; juvenals quite different; under side very rich sulphur-yellow, upper parts with a strong pale greenish gray, instead of rufous ochraceous, wash.

	WING	TAIL
♂ ad. (summer)	46–48 (46.8)	32–36 (34.0)

RANGE.—New Britain; most likely also New Ireland and New Hanover.

I thought I would have no trouble with this genus, which is better monographed than any other group of birds. However, I was mistaken! I have examined eighty-eight specimens from Queensland, New Guinea, the D'Entrecasteaux Archipelago, and New Britain, and come to conclusions that differ widely from those of Admiral Lynes. I am now waiting for the examination of the Tring material, and for additional collections (on the way from New Guinea and the Bismarck Archipelago) before I attempt to publish my unexpected findings. I take this opportunity to thank Prof. E. Stresemann, Mr. James Greenway, and Dr. Herbert Friedmann for their kindness in lending me specimens from the Zoological Museum in Berlin, the Museum of Comparative Zoölogy in Cambridge, and the United States National Museum in Washington.

Monachella mülleriana coultasi, new subspecies

TYPE.—No. 417432, Amer. Mus. Nat. Hist.; ♂ ad.; Andomgi River (2500 ft.), Wide Bay, New Britain; April 14, 1933; W. F. Coultas.

SUBSPECIFIC CHARACTERS.—Similar to *mülleriana* (Schlegel), but much darker; under parts not pure white, but light gray on breast, upper belly, flanks, and under tail-coverts; lower belly and under tail-coverts in some specimens buffy; entire back gray, not set off by a whitish collar from the brownish-black crown; rump scarcely lighter than back; upper tail-coverts blackish or dark gray, not white; axillaries and thighs gray, not whitish; size apparently as in *mülleriana* (Schlegel).

	WING	TAIL
4 ♂ ad.	92–96 (93.0)	58–60 (59.0)
4 ♀ ad.	91–93 (92.0)	56–60 (57.8)

Culmen, 16; tarsus, 16.

RANGE.—Hinterland of Wide Bay, New Britain.

It gives me great pleasure to name this highly interesting new form in honor of Mr. William F. Coultas, who did so much to further our knowledge of the bird life on New Britain. The discovery of this river chat on New Britain is certainly a most unexpected addition to the bird fauna of that island. The species was known previously only from the mainland of New Guinea where it showed no geographical variation. It is doubtful whether this weak-footed species is really so close to *Poecilodryas* as is generally supposed.